# **ADEOS-II Operation Training No.2 Routine Operation Training Plan**

Ver. 1.1

September, 2002



# **ADEOS-II Operation Training No.2 Routine Operation Training**

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Version	Date	Update Page	Comment
Ver.1.0	July,2002		
<u>Ver.1.1</u>	Sep.,2002	P3	Delete description about PO.DAAC.
		P8	Add description about training result report. Also add address to submit reports.
		P11	Revise wrong descriptions Fig. 6.1 -> Table 6.1 Delete media shipment training TKSC. Delete training item at NIPR
		P15	Modify the description of Restarting OBC training. Modify the description of Rescheduling from Mode- 1 to mode-2. Add Mean Orbit Data Delivery training item.
		P18,19	Modify the training contents of Restarting OBC operation regarding to July FtoF meeting.
		P21	Modify the description of Rescheduling from Mode-1 to mode-2.
		P22	Modify the description of InetB. Details of this training add appendix D.
		P25	Add Mean Orbit Data Delivery training description.
		P26	Delete TKCS training item from media shipment training.
		P34	Add the descriptions to data loss report training.
		P35	Add the descriptions to Delay of NRT data transmission training.
		P36,37	Add the descriptions to Re-Processing request training.
		P38	Modify the description of HK data request from POLDER.
		Appendix C	Add the description of result report.
		Appendix D	Add the sheet format using in Operation Training
		Appendix E	Add detail schedule of Restarting OBC
		Appendix F	Modify Routine Operation Training Schedule

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#### 1. Purpose

This document defines the training plan for ADEOS-II routine operation. The objective of ADEOS-II Operation Training No.2 is:

- To confirm the operation procedure of mission planning, media shipping procedure and reporting interfaces among the facilities in case of anomaly in Ground segment.
- To train operators for routine operation.

## 2. Scope

This document covers the following training items and agencies:

## 2.1. Training Items

Operation Training consists of the following items:

- (1) Mission Planning Training
  - Normal Planning Operation

This is done to understand normal procedure of mission operation planning by MMO/EOC and related facilities.

Anomaly Planning Operation

This is done to understand the procedure of mission operation planning in case of anomaly of Space/Ground segment. The reporting interface is also confirmed if it works appropriately.

(2) Media Shipment Training

During this training the media shipment interface is confirmed as well as the transportation time between facility noted and EOC.

- ASF
- WFF
- Kiruna
- CNES/POLDER
- NASDA/TKSC
- (3) Communication Training
  - Report

The reporting interfaces are confirmed during the training. The reporting interfaces confirm if the reports are delivered within appropriate schedule and contain appropriate information.

## 2.2. Ground Segment Related facilities

Fig. 2.1shows the Routine Operation Training configuration.

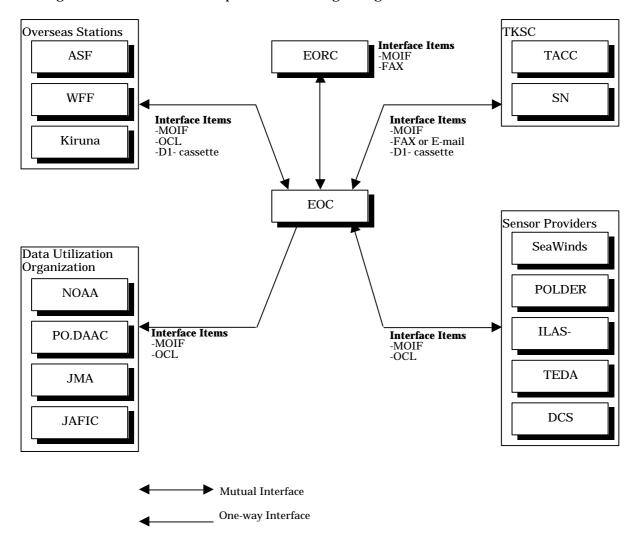


Fig. 2.1 Routine Operation Training Configuration

## (1) NASDA

#### • EOC

EOC coordinates operation plan with Sensor Providers and Overseas Stations. Next EOC coordinates final operation plan with TACC. EOC performs media shipment to overseas stations and CNES/POLDER.

## • TACC

EOC coordinates operation plan with TACC. Finally TACC generate OPLAN and sends it to EOC.

#### SN

EOC coordinates back up operation with SN. SN sends D1 - cassette to EOC.

## EORC

EOC coordinates operation request on GLI-250m and GLI-1Km with EORC. EORC generates REQQ.

## (2) Sensor Providers

• SeaWinds ground system :SeaPAC EOC coordinates operation request on SeaWinds with SeaPAC. SeaPAC generates

REQQ.

POLDER ground system :CNES

EOC coordinates operation request on POLDER with CNES/POLDER. CNES/POLDER generates REQQ .

DCS ground system :CNES

DCS receives operation plan (MOIF) and backup information (OCL) for training from NASDA/EOC during Operation Training No.2.

• ILAS-II ground system :NIES

EOC coordinates operation request on ILAS-II with NIES. NIES generates REQQ.

• TEDA ground system :TKSC/NASDA

TEDA receives operation plan (MOIF) and backup information (OCL) for training from NASDA/EOC during Operation Training No.2.

## (3) Overseas Ground Stations

• NASA ground station :ASF, WFF

EOC coordinates station operation request with ASF and WFF. ASF and WFF generate STGS.

• Kiruna ground station :SSC

EOC coordinates station operation request with SSC and generates STGS.

## (4) Data Utilization Organization and others

NOAA/NESDIS

NOAA receives operation plan (MOIF) and backup information (OCL) for training from NASDA/EOC during Operation Training No.2.

• NRT data users (JMA, JAFIC)

NRT data users receive operation plan (MOIF) and backup information (OCL) for training from NASDA/EOC during Operation Training No.2.

## 3. Change Control

This training plan is issued and maintained by NASDA/EOC. NASDA/EOC coordinates change proposals from participating facilities by Operation Coordination Letter (OCL) or at an operation interface meeting.

#### 4. Related Documents

## 4.1. Applicable Documents

- 1) ADEOS-II Operation Training Plan:AD2-EOSD-01-108
- 2) ADEOS- Implementation Plan Part between NASDA and SSC (for Operation and Maintenance): AD2-EOSD-97-004
- 3) ADEOS- Mission Operations Implementation Plan between National Space Development Agency of Japan, National Aeronautics and Space Administration of the United States of America and National Oceanic and Atmospheric Administration of the United States of America: AD2-EOC-96-055
- 4) ADEOS- Mission Operations Implementation Plan between National Space Development Agency of Japan and Center National D'Etudes Spatiales of France for ARGOS Project: AD2-EOC-95-010
- 5) ADEOS- Mission Operations Implementation Plan between National Space Development Agency of Japan and Center National D'Etudes Spatiales of France for POLDER Project: AD2-EOC-95-011ADEOS-II Mission Operation Implementation Plan (MOIP); prepared for each agency.
- 6) ADEOS- MISSION OPERATIONS INTERFACE SPECIFICATION ( MOIS ) ( NASDA/CNES ARGOS ): AD2-EOC-97-040
- 7) ADEOS- MISSION OPERATIONS INTERFACE SPECIFICATION ( MOIS ) ( NASDA/CNES POLDER ): AD2-EOSD-98-015
- 8) ADEOS- MISSION OPERATIONS INTERFACE SPECIFICATION ( MOIS ) ( NASDA/NASA/NOAA ): AD2-EOC-97-046
- 9) ADEOS- MISSION OPERATIONS INTERFACE SPECIFICATION( MOIS )Common Part : AD2-EOC-96-054
- 10) ADEOS- Contact Points Document: AD2-EOC-96-124

## 4.2. Reference Document

1) ADEOS-II Mission Simulation Test Plan Version1.0(Draft/Rev. E) May 2001:AD2-EOSD-99-012(NEB-99031)

## 4.3. Training Report

It is necessary for participants of the training to generate Training Reports for each Training Segment. The training result is reported after finishing each training segment. The reporting format is defined in Appendix C.

#### 5. Overview

This is performed as integrated operation training for the routine operation phase with all ADEOS-II participating facilities.

## (1) Training Policy

The policy of Routine Operation Training is:

The operator should perform each training segment.

The training is performed by the schedule of MOIS.

If some anomaly happens during training, each operator should perform recovery action as performed in operation.

If some anomaly happens during training and training cannot be continued, NASDA will decide if training is to be stopped after related agencies confer about anomaly.

The MOIF may be simulated or real.

The simulated interface is distinguished and remarked in the training procedure.

#### (2) Training compositions

The Routine Operation Training consists of three parts. Each training part is shown below. Each training segment includes several training items.

Mission Planning Training

## • Normal Planning Operation

This is the training for mission operation planning without anomaly. This procedure is done with normal daily schedule.

## Anomaly Planning

This is the training for anomaly mission operation planning such as rescheduling. This procedure is done after Normal Planning Operation training is completed.

Media Shipment Training.

#### Overseas Stations (ASF, WFF and Kiruna)

This is the training for media shipment of ADEOS-II RAW data. This procedure is done following the normal daily schedule described in the MOIS. Overseas Stations send D1-cassette (formatted D1-cassette, but it is not necessary to record the mission or simulated data) three times a week. Also Overseas Stations generate SRRM after sending D1-cassettes.

#### POLDER

This is the training for media shipment of POLDER edited level 0 data. This procedure is done following the normal schedule described in the MOIS. EOC sends D1-cassette, with recorded POLDER level 0 data, once a week.

## **Communication Training**

## Report

This is the training for reporting several specific cases of ADEOS-II operations as described in the MOIS. This procedure is done with special operation as described in the MOIS and using OCL for specified format.

## (3) Training conditions

**Mission Planning Training** 

- a. This training is performed during normal working time of EOC. (UT0:20-8:35)
- b. This training is performed during operation week (Wed. to Tue.) as described in the MOIS.
- c. Submitting REQR needs two operation weeks.
- d. Re-scheduling of operation plan should be separate for each training items.
- e. This Training is done with MPT of Operation Training No.3.

## Media Shipment Training

- a. RAW data re-sending request is performed with media shipment between overseas stations and EOC. The request will be issued from EOC.
- b. POLDER L0 edited data re-sending request is performed with media shipment from EOC to CNES/POLDER. The request will be issued from EOC.
- c. EOC will not perform L0 processing and L0 edit processing (POLDER) on received media from overseas stations.
- d. Media Shipment Training is included the MOIF interface.

## **Communication Training**

- a. Communication training is performed only to make contact with all related agencies using correct form as described in the MOIS.
- b. This training is performed within CoO in September.

## (4) Organization and Responsibilities

Routine Operation Training is executed and controlled by the Routine Operation Training Office that is set up in NASDA/EOC. Responsibilities of Routine Operation Training Office are:

- Announcement of training information for Operation Training No.2
- Collection of Training Results and Problem Reports for Operation Training No.2.
- Maintenance of the ADEOS-II Routine Operation Training Plan.
- Issuance of training summary report for Operation Training No.2.

Fig. 5.1shows the relationship between ADEOS-II Routine Operation Training Office and related agencies.

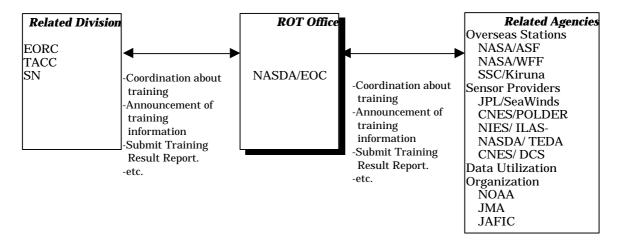


Fig. 5.1 Relationship between ADEOS-II Routine Operation Training(ROT) Office and Related Agencies.

## (5) Documents used during training

Document which will be prepared before <u>Routine Operation</u> training is executed The following document is prepared before Routine Operation Training is executed.

• ADEOS-II Routine Operation Training Plan (this document)
Document made when training is executed

The following documents are made when Routine Operation Training is executed and related agencies submit these documents to the Routine Operation Training Office.

## • Training Results Report

Training Results Report for ROT should be written by Operators. All related agencies operators report should include Training ID (see Appendix C Table C-2), results, problems incurred, and comments and/or suggestions to modification of operations procedure.

Training Results Report(s) for Operation Training No.2 are submit to

Hirohiko Dosho (NASDA/EOC) : dosho.hirohiko@nasda.go.jp CC: Toshihiro Masuda (RESTEC): t.masuda@restec.or.jp

#### Problem Report

Problem(s) should be reported to Operation Training No.3 Office.

ad2mst@eoc.nasda.go.jp

## (6) Work Flow

Fig. 2 shows workflow of this training.

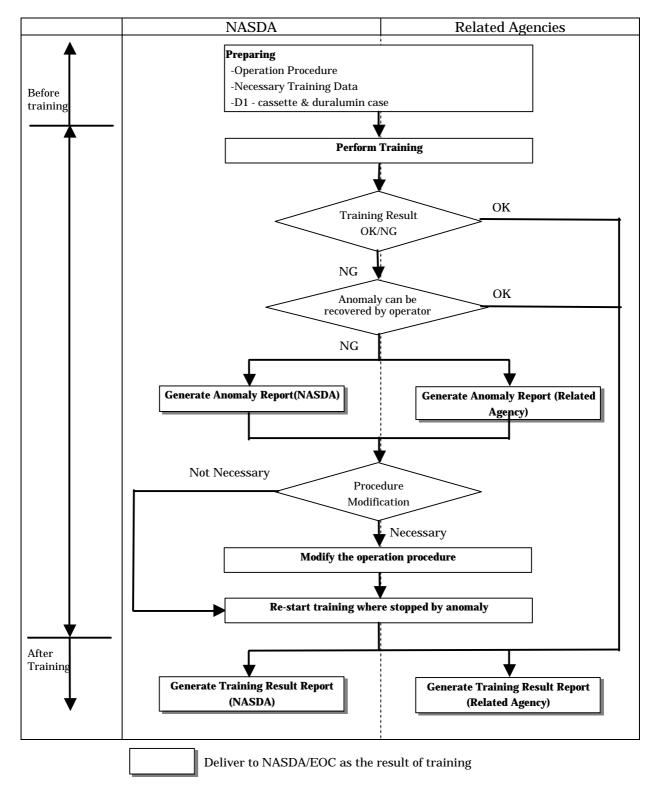


Fig. 5.2 Routine Operation Training Work Flow

• Before training, NASDA and all related agencies prepare operation procedure

documents, necessary training data and D1 cassette to perform training.

- If some anomaly occurs during training and operator can recover from anomaly, training will continue.
- If training is not completed successfully, the concerned agency will generate an Anomaly Report, and provide it to NASDA.
- In anomaly case during training, NASDA will coordinate with related agencies to modify the operation procedure, as needed.
- Training will re-start where training was stopped.
- Finally, NASDA and all related agencies will prepare Training Result Reports.
   The format of Training Result Report is shown in Appendix C.

## (7) Training ID definition

During Routine Operation Training, several kinds of training will be performed, and each training is identified by individual ID. This ID should be used to control and progress of training.

The IDs of Routine Operation Training are shown in Appendix B.

## 6. Framework

Training items and participants are shown in Table  $\underline{\textbf{6.1}}$ 

<u>Table</u>. 6.1Training Items and participants (1/2)

Name	Items		NA	SDA			Se	nsor Provid	ler		Overseas Stations	NRT data	Foreign Station
		EOC	AD2 Proj	EORC	_	Sea Winds	POLDE R	ILAS-II	DCS	TEDA	NGN Kiruna	Users	NIPR
Mission I	Planning Training		J	•	I.	•	•	•		•	•		•
	al Planning Operation												
M	lode-1 Planning												
M	lode-2 Planning												
Re	e-submitting REQR												
	e-submitting REQQ												
Anom	aly Planning				•							•	
Re	estarting OBC												
M	escheduling from Mode-1 to lode-2				_								
	nternet-Back-up												
	requency change of Orbit info.				_								
IL	AS-II Campaign												
	nipment Training	•				•				•			
ASF													
	ledia Shipment												
	equest for re-sending RAW data												
WFF						•				•			
	ledia Shipment												
	equest for re-sending RAW data												
Kirun													
	ledia Shipment												
	equest for re-sending RAW data												
TKSC					T	T		T		T	1		I
	ack up operation		<u> </u>						<u> </u>				
	ledia Shipment												
POLD					Г	1		1		1	1	1	1
	ledia Shipment												
	equest for re-sending edited L0												

## Table 6.1 Training Items and participants (2/2)

Na	ame	Items		NAS	SDA			Se	nsor Provid	ler		Overseas Stations	NRT data	Foreign Station
			EOC	AD2	EORC	TKSC	Sea	POLDE	ILAS-II	DCS	TEDA	NGN	Users	
				Proj			Winds	R				Kiruna		NIPR
Coı	mmun	ication Training												
	Repor	t												
	Da	nta loss												
	NI	RT data abnormal case												
	Re	eprocessing request												
	H	K data request form POLER												

## 7. Training Schedule

The schedule of Routine Operation Training is shown in Appendix D

Even if it is after establishment of this Routine Operation Training Plan, the training schedule may be changed as necessary, due to reasons agreed to by all related agencies.

## 8. Mission Planning Training

#### 8.1. Objective

Mission Planning training is the training to confirm the operability and procedure of ADEOS-II operation plan according to the operation time line and anomaly case by using samples of the MOIF.

#### 8.2. Overview

Mission planning training is summarized in Table. 8.1.

Training name **Training Items** Training ID Contents of Training Mode-1 Planning **Planning** Planning Mission Normal 2111000 **Training** Operation 2112000 Mode-2 Planning Re-submitting REQR 2113000 2114000 Re-submitting REQQ Anomaly **Planning** 2121000 **Restarting OBC** Operation 2122000 Rescheduling from Mode-1 to Mode-2 (done with 2121000) 2123000 Internet-Back-up

2124000 2125000 ILAS-II Campaign

Mean Orbit Data Delivery

**Table. 8.1** Mission Planning Training Items

#### 8.3. Training Plan

#### 8.3.1. Normal Planning Operation

Normal Planning operation will be continuously performed for five weeks as normal planning procedure and error case that will be happened in normal Planning such as error REQQ and pass rejection case.

Normal Planning operation will be performed same as routine operation procedure and its coverage is from Wednesday to Tuesday.

Normal Planning operation include error REQQ case at sensor provider and pass rejection case at overseas stations. Each case will be performed in a separate week.

#### 8.3.2. Anomaly Planning Operation

Anomaly Planning operation will be performed after Normal Planning operation training and it will be generated as an event for the training period.

**Restarting OBC** 

The training for "restarting OBC" is the recovery Planning operation in case of OBC start up. If some anomaly occurs at ADEOS-II and NASDA performs trouble shooting. After

that all related agencies will performed recovery Planning operation.

Rescheduling from Mode-1 to Mode-2

The training for "Rescheduling from Mode-1 to Mode-2" is the recovery Planning operation in case of IOCS or DRTS trouble. If some anomaly occurs at IOCS or DRTS and Mode-1 operation can not continue operation. NASDA will decide to change Mode-1 operation to Mode-2 operation. This training is done with restarting OBC training.

Internet Back up

Planning operation with Internet back-up procedure in case of NASDA/all related agencies network trouble.

ILAS-II Campaign

NASDA/EOC will notify changing frequency orbit delivery due to ILAS-II campaign and sends orbit data everyday or three times a week. This training will be performed with frequency change of orbit information file delivery.

Mean Orbit Data Delivery

The training for " Mean Orbit Data Delivery" is the delivery of Mean Orbit Data to SeaPAC and NIES when +DV maneuver is performed on Thursday.

## 8.3.3. Contents of Training

## (1) Normal Planning Operation

Training Items	Working Items	Response	Training
Normal Planning	Mode-1	All agencies	• All related agencies will generate Mode-1 operation planning in Training Week #79.
Operation	Planning		• Timing of transmit and receive MOIF is specified in the MOIS.
	Mode-2	All agencies	• All related agencies will generate Mode-2 operation planning in Training Week # 75-78.
	Planning		Timing of transmit and receive MOIF is specified in the MOIS.
	Re-submitting	Overseas	• Overseas stations should sends STGS in case of pass rejection in Training Week #77.
	REQR	stations	• Overseas stations receive new REQQ from EOC. Then overseas station generates and sends new STGS to NASDA/EOC.
		NASDA/EOC	• NASDA/EOC receives pass rejected STGS and re-planning. Then sends new REQR to overseas stations.
			• NASDA/EOC receives new STGS from overseas stations and generates final operation plan.
	Re-submitting REQQ	Sensor provider	• Each sensor provider generate format error REQQ and sends it to NASDA/EOC in Training Week #78.
			• Each sensor provider receives REQA from NASDA/EOC. Then each sensor provider generates correct REQQ and sends it NASDA/EOC.
		NASDA/EOC	• NASDA/EOC receives format error REQQ. NASDA/EOC generates REQA and sends it to sensor provider.
			• NASDA/EOC receives correct format REQQ from sensor provider. Then NASDA/EOC generates final operation plan.

Table.8.2 Normal Planning Opretaion Timeline

					aining V														k #75				Week						k #77					Week #7				_		ek #79	
<u> </u>					Month											28	Aug. 20	2	31 1 2	3	1	5 6	7	Ω	0 1	n 1	1 12	12	1 15	Sep.	17	10	10 20	0 21	22	23	24 2	E 26	27	28	20 30
L																Wed.	Thu. Fri	S	Sat Sun Mor	Tue	Wed.	Thu. Fi	ri Sa	t Sur	1 Mon T	ue We	ed. Thu.	Fri S	at Sur	n Mon	Tue	Wed.	Thu. Fr	i Sat	Sun	Mon 7	Tue We	ad. Thu	ı. Fri	Sat S	Sun Mon
	Event	File Name	MMO	DDS	OREC	ASDA HK	TACC	EORC	Sea C Pac P	OLDER JAPAN	EA I NIES	NASDA TEDA	NASA NGN	Kiruna NOAA	Delivery Deadline																										
	GLI-250m Operation Request	REQQ	rcv		fwd		_	snd	-		-	-	-		UT04:30																				لسا						
	GLI-1Km Operation Request	REQQ	rcv		fwd	-	-	snd	-		-	-	-		UT04:30																										
N	KSA Operation Information	SNKEVT	rcv	fwd	-	-	-	-	-		-	-	-		UT06:00																										
A	Planning IOCS operation by MMO		-	-	-	-	-	-	-		-	-	-		-																										
	KSA Operation Request	SNKREQ	snd		-	-	-	-	-		-	-	-		UT06:00																										
	KSA Operation Request Result (Draft)	SNKRSLT	rcv		-	-	-	-	-		-	-	-		UT01:30						l																				
	KSA Operation Plan (Draft)	SNKPLN	rcv		-	-	-	-	-		-	-	-		UT01:30																										
	KSA Operation Request Result	SNKRSLT	rcv		-	-	-	-	-		-	-	-		UT01:30																										
	KSA Operation Plan	SNKPLN	rcv		-	-	-	-	-		-	-	-		UT01:30																										
	Reply to Operatiopn Request GLI-250m	REQA	snd		fwd	-	-	rcv	-		-	-	-		anytime																										
	GLI-250m Operation Request	REQQ	rcv	fwd	fwd	-	-	snd	-		-	-	-		UT04:30																										
	GLI-1Km Operation Request	REQQ	rcv	fwd	fwd	-	-	snd	-		-	-	-		UT04:30																										
	Planning DT operation by MMO	-	-	-	-	-	-	-	-		-	-	-		-																										
	Station Operation Request	REQR	snd		-	-	-	-	-		-	-	rcv	rcv -	UT08:00															•											
	Reply to Station Operation Request	STGS	rcv	fwd	-	-	-	-	-		-	-	snd	snd -	UT01:00																<b>→</b>										
	Planning DT operation by MMO	-	-	-	-	-	-	-	-		-	-	-		-																										
	Reply to Operatiopn Request GLI-250m	REQA	snd	fwd	fwd	-	-	rcv	-		-	-	-		anytime						l												<b>→</b>								
	SeaWinds Operation Request	REQQ	rcv	fwd	-	-	-	-	snd		-	-	-		UT05:00																		<b>→</b>								
	POLDER Operation Request	REQQ	rcv		-	-	-	-	-	snd -	-	-	-		UT05:00																		<b>→</b>					_	Ш.		
e	ILAS-II Operation Request	REQQ	rcv		-	-	-	-	-		snd	-	-		UT05:00												-														
ï	VMS Operation Request	REQQ	rcv	fwd	-	snd	-	-	-		-	-	-		UT08:00						ļ į												<b>→</b>								
	DMS Operation Request	REQQ	rcv		-	snd	-	-	-		-	-	-		UT08:00																		<b>→</b>								
	Reply to Operatiopn Request SeaWinds	REQA	snd		-	-	-	-	rcv		-	-	-		UT06:00																							L_			
	Reply to Operatiopn Request POLDER	REQA	snd		-	-	-	-	-	rcv -	-	-	-		UT06:00																										
	Reply to Operatiopn Request ILAS-II	REQA	snd	_	-	-	-	-	-		rcv	-	-		UT06:00																										
	Reply to Operatiopn Request VMS	REQA	snd	_	-	rcv	-	-	-		-	-	-		UT06:00																				لسلا			_			
е	Reply to Operatiopn Request DMS	REQA	snd	fwd	-	rcv	-	-	-		-	-	-		UT06:00						ļ.																				
t	Planning DT operation by MMO	-	-	-	-	-	-	-	-		-	-	-		-																										
	Operation Request	REQ	snd		-	-	-	-	-		-	-	-		UT03:00																										
	Operation Plan to EOC	OPLAN	rcv		-	-	-	-	-		-	-	-		UT06:00																										
	Operation Plan to All Agencies	OPLN	snd	fwd	fwd	-	-	rcv	rcv	- rcv	rcv	rcv	rcv	rcv rcv	UT08:00																							_			
	Operation Plan to POLDER	OPL1	-	-	-	-	-	-	-	rcv -	-	-	-		UT08:00																										
	Acquisition Plan	SHAQ	snd		-	-	-	-	-		-	-	rcv	rcv -	UT08:00																										
	Lverl 0 Processsing Info.	LV0P	snd	fwd	-	-	-	-	-		-	-	rcv	rcv -	UT08:00																										
	GLI NRT Product Processing Info.	RTIG	snd		-	-	-	-	-		-	-	rcv		UT08:00																										
L	Orbit Data (predictive)	EP	snd		-	-		rcv	rcv	rcv rcv	rcv	rcv	rcv	rcv rcv	UT08:00																										
1	ADEOS-II Orbit Data (TBD)	AD2EOCF	rcv	fwd	-	-	-	-	-		-	-	-		UT07:00						Ш																		Ψ_		
															UT04:00						1						_									$\blacksquare$			—		
	Orbit Data	EP	snd	_	-	-	-		_		rcv	_			UT08:00					1							4-4												Ш.		
		ED	snd	_	-	-	-			rcv rcv	rcv	rcv	rcv		UT08:00					1																			Ш.		
$\Box$	Time Difference	TD	snd	fwd	-	-	-	-	rcv	rcv rcv	rcv	rcv	rcv	rcv rcv	UT07:00																										

Due date for MOIF I/F

## (2) Restarting OBC operation (Sheet format is shown Appendix D)

Training Items	Working Items	Response	Training
Anomaly Planning Operation	Restarting OBC	NASDA/EOC	<ul> <li>NASDA/EOC generates operation change request for all related agencies and sends it to all related agencies by OCL (FAX and e-mail attached OCL form).</li> <li>NASDA/EOC re-schedule Mode1 operation to Mode-2 operation.</li> <li>NASDA/EOC receives answer of operation change notification from sensor provider, NASDA/EORC, NASDA/ADEOS-II project by OCL (FAX and e-mail attached OCL form).</li> <li>NASDA/EOC receives the first REQR receiving readiness notification from Overseas stations. Then NASDA/EOC generates REQR and sends it to overseas stations.</li> <li>NASDA/EOC receives REQQ from sensor providers. ADEOS-II Project and EORC. If their REQQ have format error, NASDA/EOC generates and sends REQA to them.(for training</li> <li>NASDA/EOC receives STGS from overseas stations and generates REQ.</li> <li>NASDA/EOC sends REQ to NASDA/TACC. Then NASDA/EOC receives OPLAN from NASDA/TACC. (TACC is simulated in MMO)</li> <li>NASDA/EOC makes and sends OCL (FAX and e-mail attached OCL form) to alert the overseas stations of a new LVOP, RTIG. SHAQ.</li> <li>NASDA/EOC generates OPLN, OPL1, LVOP, etc. and sends it to all related agencies.</li> </ul>
		Sensor provider	<ul> <li>Sensor provider receives operation change notification from NASDA/EOC. Then sensor provider makes answer of operation change notification.</li> <li>Sensor provider generates updated REQQ that includes operation request only after restart of routine operation and sends it to NASDA/EOC.</li> <li>If Sensor provider receives REQA from NASDA/EOC, then sensor provider generates and sends new REQQ to NASDA/EOC.</li> <li>Sensor providers receive OPLN (OPL1 for POLDER) from NASDA/EOC.</li> </ul>
		NASDA/EORC	<ul> <li>NASDA/EORC receives operation change notification from NASDA/EOC. Then NASDA/EORC makes answer of operation change notification.</li> <li>NASDA/EORC receive OPLN (OPL1 for POLDER) from NASDA/EOC.</li> </ul>

NASDA/ADEO S-II Project  NASDA/ADEO Then NASDA/ADEOS-II Project receives operation change no Then NASDA/ADEOS-II Project makes answer of operation  NASDA/ADEOSII Project receive OPLN (OPL1 for POLDE)	
S-II Project  Then NASDA/ADEOS-II Project makes answer of operation  NASDA/ADEOSII Project receive OPLN (OPL1 for POLDE)	
The state of the s	ion change request.
• Overseas stations receive operation change notification from Overseas stations make the first REQR receiving readin OCL (FAX and e-mail attached OCL form )	rom NASDA/EOC.
Overseas stations receive REQR from NASDA/EOC. Then and send it to NASDA/EOC as soon as possible.	n overseas stations make STGS
<ul> <li>Overseas stations receive OCL (FAX and e-mail attached Ostations of a new LV0P, RTIG, SHAQ.</li> <li>Overseas stations receive OPLN, LV0P, SHAQ and RTIG.</li> </ul>	,

Table 8.3 Restarting BC Timeline (with Mode1 to Mode2 change)

	-	raining \		.0 10	COLG	1 (111)	, 50			<i>-</i> ( <b>v</b> ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	viou	01 10	IVIO	ucz	Criariy	<u> </u>						Week #80					
		Montl																					October					
		Day																	2				3			4		
		Time															0	4	Wedne 8		16	20	Thursday	0	4	Frid	lay 12	16
Event	File Name			NA	SDA	1		Sea	CNES/	CLS/	EA	NASDA	NASA	Kiruna	NOAA	Delivery		7	Ŭ	12	10	20		ľ		Ŭ		10 2
		MMO	EOC	OREC	HK	TACC	EORC	Pac	POLDER	JAPAN	NIES	TEDA	NGN			Deadline UTC												
			-		-	-	-	-	-	-	-	-	-	-	-													
Operation Change Request (external)	OCL (FAX&E-mail)		snd		-	-	-	rcv	rcv	rcv	rcv	rcv	rcv	rcv	rcv	01:30												
Ready notification for first REQR receive	OCL (FAX&E-mail)		recv		-	-	-	-	-	-	-	•	snd	snd	-	02:30												
Planning DT operation by MMO	-	-		•	-	-	-	-	-	-	-	•	-	-	-													
Station Operation Request	REQR	snd	fwd	1	-	-	-	-	-	-	-	1	recv	recv	-	04:00												
Reply to Station Operation Request (NGN)	STGS	recv	fwd	-	-	-	-	-	-	-	-	-	snd		-	06:00												
Reply to Station Operation Request (Kiruna)	STGS	recv	fwd	1	-	-	-	-	-	-	-	1		snd	-	09:00												
Operation Request Answer	OCL (FAX&E-mail)		rcv		-	-	-	snd	-	-	-	1	-	-	-	02:00												
Operation Request Answer (POLDER)	OCL (FAX&E-mail)		rcv		-	-	-	-	snd	-	-	•	-	1	-	09:00												
Operation Request Answer (LAS-II)	OCL (FAX&E-mail)		rcv		-	-	-	-	-	-	snd	•	-	1	-	02:00											I	
<sup>R</sup> Operation Request Answer (ADEOS-II PJ)	FAX&E-mail		rcv		-	-	-	-	-	-	-	•	-	1	-	02:00												
S Operation Request Answer (NASDA/EORC)	FAX&E-mail		rcv		-	-	-	-	-	-	-	ı	-	1	-	02:00												
a SeaWinds Operation Request	REQQ	recv	fwd	-	-	-	-	snd	-	-	-	-	-	-	-	03:00												
POLDER Operation Request	REQQ	recv	fwd	1	-	-	-	-	snd	-	-	1	-	-	-	11:00												
ILAS-II Operation Request	REQQ	recv	fwd	ı	-	-	-	-	-	-	snd	•	-	1	-	03:00												
yMS Operation Request	REQQ	recv	fwd	ı	-	-	-	-	-	-	-	•	-	1	-	03:00												
O DMS Operation Request	REQQ	recv	fwd	-	-	-	-	-	-	-	-	-	-	-	-	03:00												
GLI-250m Operation Request	REQQ	recv	fwd	fwd	-	-	-	-	-	-	-	-	-	-	-	03:00											i	
GLI-1Km Operation Request	REQQ	recv	fwd	fwd	-	-	-	-	-	-	-	1	-	-	-	03:00												
Reply to Operatiopn Request GLI-250m	REQA	snd	fwd	fwd	-	-	-	-	-	-	-	1	-	-	-	05:00												
Operation Request (simulated in MMO)	REQ	-		•	-	-	-	-	-	-	-	•	-	-	-	-												
Operation Plan to EOC (simulated in MMO)	OPLAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
SHAQ, LV0P, OPLN sending notification	OCL (FAX&E-mail)		snd		-	-	-	-	-	-	-	-	rcv	rcv	-	02:00												
Operation Plan to All Agencies	OPLN	snd	fwd	fwd	_	-	_	recv		recv	recv	recv	recv	recv	recv	03:50											T	
Operation Plan to POLDER	OPL1	-	-	-	-	-	-	-	recv	-	-	-	-	-	-	03:50												
Acquisition Plan	SHAQ	snd	fwd	-	-	-	-	-	-	-	-	-	recv	recv	-	03:55												
Lverl 0 Processsing Info.	LV0P	snd	fwd	-	-	-	-	-	-	-	-	-	recv	recv	-	04:00												
GLI NRT Product Processing Info.	RTIG	snd	fwd	-	-	-	-	-	-	-	-	-	recv	recv	recv	04:05												

Detal schedule of Restrting OBC is shown in Appendix E

(3) Rescheduling from Mode-1 to Mode2 (This training is done with Restarting OBC operation)

The content of training is same as Restarting OBC operations. Refer to Page 19.

## (4) Internet-Backup

The content and procedure of InetB training is refer to IntB Ops. Training Plan.

## (5) ILAS-II Campaign

Training Items	Working Items	Response	Training
Anomaly Planning Operation	ILAS-II Campaign	ILAS-II	<ul> <li>ILAS-II submits change frequency of orbit data request to NASDA/EOC by OCL. (2 weeks before campaign week.)</li> <li>ILAS-II receives answer of change frequency of orbit data request from NASDA/EOC by OCL.</li> <li>ILAS-II receives orbit info every day during campaign week.</li> </ul>
		NASDA/EOC	<ul> <li>NASDA/EOC receives change frequency of orbit data request from ILAS-II.</li> <li>NASDA/EOC informs all related agencies that frequency of orbit data delivery change by OCL. (4 days before campaign week.)</li> <li>NASDA/EOC sends priority change request of ILAS-II level0 data to SSC by OCL. (4days before campaign week)</li> <li>NASDA/EOC receives orbit data everyday from NASDA/TACC and sends it to all related agencies. (TACC is simulated in MMO)</li> </ul>
		SSC/Kiruna Other related	<ul> <li>SSC receives priority change request of ILAS-II level0 data and change frequency of orbit data request from NASDA/EOC by OCL.</li> <li>SSC change priority of transmitting ILAS-II level 0 data day before first day of campaign week.</li> <li>SSC put back priority of transmitting ILAS-II level 0 data after end of campaign.</li> <li>Other related agencies are receive change frequency of orbit data notification from</li> </ul>
		agencies	NASDA/EOC <u>by OCL</u> .

Table 8.4 ILAS-II Campaign Time line

		Training Week														Veek #7										Week #	‡76					V	Neek #77	7		#78
		Month													Αu	ıdast 2	002											Septe	mber 200	)2						
		Day												. 26	27	28	29	30	31	_1_	2	3	. 4	_5	6	7	8	9	_10	.11	_12	13	14		16 1	
Event	File Name	EOC MMO DDS OREC	SDA HK TA	.CC EOR	Sea C Pac	a CNES	/ CLS/ F JAPAN	EA NIES	NASDA TEDA	NASA NGN	Kiruna	NOAA	Deliverv Deadline	Mon	Tue	Wed.	Thu.	Fri	Sat	Sun	Mon	Tue	Wed.	Thu.	Fri	Sat	Sui	n Moi	n Tue	Wed.	Thu.	Fri	Sat	Sun	Mon Tu	.e Wed
Frequency change of Orbit info. Delivery	OCL	rcv	-		-	-	-	snd	-	-	-	-							į		1				1				1					1		
Operation Change Request	FAX	snd	- n	cv -	-	-	-	-	-	-	-	-							ļ						•		1		1							
Anser of Frequency change of Orbit info. Delivery	FAX	snd	-		-	-	-	rcv	-	-	-	-							İ																	
Frequency change of Orbit info. Delivery	OCL	snd	rcv	- rc\	rcv	/ rcv	rcv	-	rcv	rcv	rcv	rcv							į		i				1				1							
Orbit Data (predictive)	EP	snd fwd -	-	rec	v rec	v recv	recv	recv	recv	recv	recv	recv	UT08:00						I										1							
Frequency change of Orbit info. Delivery	OCL	snd	rcv r	cv rcv	rcv	/ rcv	rcv	-	rcv	rcv	rcv	rcv									i				l				1							

Due date for MOIF I/F

## (6) Mean Orbit Data Delivery

Training Items	Working	Response	Training
	<u>Items</u>		
<u>Anomaly</u>	Mean Orbit	NASDA/TACC	• NASDA/TACC sends Mean Orbit Data of ADEOS-II to SeaPAC and NIES by using e-mail
<u>Planning</u>	Data Delivery		via internet until UT7:30 on Wednesday. (During training, NASDA will delivery two
<u>Operation</u>			times. One is from NASDA/EOC, the other is from NASDA/TACC From NASDA/EOC is
			not normal interface in routine operation. This is just training case.)
		<u>SeaWinds</u>	• SeaPAC receives Mean Orbit Data of ADEOS-II from NASDA/TACC by e-mail via
			<u>internet.</u>
		ILAS-II	• ILAS-II receives Mean Orbit Data of ADEOS-II from NASDA/TACC by e-mail via
			<u>internet.</u>

## 9. Media Shipment Training

## 9.1. Objective

Media shipment training is the training to confirm the operability and procedure of ADEOS-II RAW data and L0 edited data transmission plan according to the operation time line by using D1 cassettes and Duralumin case.

#### 9.2. Overview

Media Shipment Training is summarized in Table. 9.1.

**Table. 9.1 Media Shipment Training Items** 

Training name	Training Items	Training ID	Contents of Training
MST	ASF Station	2211000	Media Shipment
Media Shipment		2212000	Request for re-sending RAW
Training			data
	WFF Station	2221000	Media Shipment
		2222000	Request for re-sending RAW
			data
	Kiruna Station	2231000	Media Shipment
		2232000	Request for re-sending RAW
			data
	POLDER	2251000	Media Shipment
		2252000	Request for re-sending edited
			L0 data

## 9.3. Training Plan

## 9.3.1. Overseas stations (ASF, WFF, Kiruna)

Overseas stations will perform media shipment work for one week according to routine operations. Each station packs the D1-cassette tapes in Duralumin case and sends it to NASDA/EOC by the courier company specified in the MOIS. Overseas stations send D1-cassette tapes three times a week.

During this training, NASDA/EOC will send Raw data readability report (RDRM) for resending specified D1-cassette tape that is specified in RDRM. Overseas stations send back-up D1-cassette tape with the other one to NASDA/EOC.

#### 9.3.2. POLDER

NASDA/EOC will perform one-day media shipment work according to routine operations. NASDA/EOC receives D1-cassette tapes from overseas stations three times a week. All RAW data, as need for POLDER L0 editing, are collected in NASDA/EOC, then

NASDA/EOC send D1-cassette tape, recorded POLDER L0 edited data, to POLDER on Wednesday.

## 9.3.3. Contents of Training

# (1) ASF

Training Items	Working Items	Response	Training										
ASF	Media Shipment	ASF Monday	<ul> <li>ASF packs six D1-casette tapes that were recorded over three days (Fri. Sat. and Sun.) data in Duralumin case.</li> <li>ASF sends one Duralumin case to NASDA/EOC by specified courier company on Monday.</li> </ul>										
			• ASF sends SRRM to NASDA/EOC										
		ASF Wednesday	• ASF packs four D1-casette tapes that were recorded over two days (Mon. and Tue.) data in Duralumin case.										
			• ASF sends one Duralumin case to NASDA/EOC by specified courier company on Wednesday.										
			• ASF sends SRRM to NASDA/EOC.										
		ASF Friday	• ASF packs four D1-casette tapes that were recorded over two days (Wed. and Thurs.) data in Duralumin case.										
			<ul> <li>ASF sends one Duralumin case to NASDA/EOC by specified courier company on Friday.</li> <li>ASF sends SRRM to NASDA/EOC.</li> </ul>										
		ASF One day during training	• ASF receives RDRM from NASDA/EOC.										
			NASDA/EOC receives one Duralumin case from ASF that was sent on Monday.										
			• NASDA/EOC receives one Duralumin case from ASF that was sent on Wednesday.										
			NASDA/EOC receives one Duralumin case from ASF that was sent on Friday.										
	Decree et Comme	NACDA/EOC	NASDA/EOC sends RDRM to ASF.										
	Request for re- sending RAW	NASDA/EOC	NASDA/EOC sends RDRM that includes error case.  NASDA/EOC sends RDRM that includes error case.										
	data	ACE	NASDA/EOC receives D1-cassette tape that was specified in RDRM.  AGE     NASDA/EOG     NASDA/EOG										
		ASF	• ASF receives RDRM include error case from NASDA/EOC.										
			• ASF chooses error D1-cassette tape and sends it to NASDA/EOC with regular shipment.										

# (2) WFF

Training Items	Working Items	Response	Training							
WFF	Media Shipment	WFF Monday	<ul> <li>WFF packs two D1-casette tapes that were recorded over three days (Fri. Sat. and Sun.) data in Duralumin case.</li> <li>WFF sends one Duralumin case to NASDA/EOC by specified courier company on Monday.</li> <li>WFF sends SRRM to NASDA/EOC</li> </ul>							
		WFF Wednesday	<ul> <li>WFF packs one D1-casette tape that was recorded over two days (Mon. and Tue.) data in Duralumin case.</li> <li>WFF sends one Duralumin case to NASDA/EOC by specified courier company on Wednesday.</li> <li>WFF sends SRRM to NASDA/EOC.</li> </ul>							
		WFF Friday	<ul> <li>WFF packs one D1-casette tape that was recorded over two days (Wed. and Thurs.) data in Duralumin case.</li> <li>WFF sends one Duralumin case to NASDA/EOC by specified courier company on Friday.</li> <li>WFF sends SRRM to NASDA/EOC.</li> </ul>							
		WFF One day during training	WFF receives RDRM from NASDA/EOC.							
		NASDA/EOC	<ul> <li>NASDA/EOC receives one Duralumin case from WFF that was sent on Monday.</li> <li>NASDA/EOC receives one Duralumin case from WFF that was sent on Wednesday.</li> <li>NASDA/EOC receives one Duralumin case from WFF that was sent on Friday.</li> <li>NASDA/EOC sends RDRM to WFF.</li> </ul>							
	Request for resending RAW	NASDA/EOC	<ul> <li>NASDA/EOC sends RDRM that include error case.</li> <li>NASDA/EOC receives D1-cassette tape that was specified in RDRM.</li> </ul>							
	data	WFF	<ul> <li>WFF receives RDRM include error case from NASDA/EOC.</li> <li>WFF chooses error D1-cassette tape and sends it NASDA/EOC with regular shipment.</li> </ul>							

## (3) Kiruna

Training Items	Working Items	Response	Training										
Kiruna	Media Shipment	Kiruna Monday	• Kiruna packs three D1-casette tapes that were recorded over three days (Fri. Sat. and Sun.) data in Duralumin case.										
			• Kiruna sends one Duralumin case to NASDA/EOC by specified courier company on Monday.										
			Kiruna sends SRRM to NASDA/EOC										
		Kiruna Wednesday	• Kiruna packs two D1-casette tapes that were recorded over two days (Mon. and Tue.) data in Duralumin case.										
			• Kiruna sends one Duralumin case to NASDA/EOC by specified courier company on Wednesday.										
			• Kiruna sends SRRM to NASDA/EOC.										
		Kiruna Friday	• Kiruna packs two D1-casette tapes that were recorded over two days (Wed. and Thurs.) data in Duralumin case.										
			• Kiruna sends one Duralumin case to NASDA/EOC by specified courier company on Friday.										
			Kiruna sends SRRM to NASDA/EOC.										
		Kiruna	Kiruna receives RDRM from NASDA/EOC.										
		One day											
		during											
		training											
		NASDA/EOC	NASDA/EOC receives one Duralumin case from Kiruna that was sent on Monday.										
			• NASDA/EOC receives one Duralumin case from Kiruna that was sent on Wednesday.										
			• NASDA/EOC receives one Duralumin case from Kiruna that was sent on Friday.										
			NASDA/EOC sends RDRM to Kiruna.										
	Request for re-	NASDA/EOC	NASDA/EOC sends RDRM that includes error case.										
	sending RAW		NASDA/EOC receives D1-cassette tape that was specified in RDRM.										
	data	Kiruna	• Kiruna receives RDRM including error case from NASDA/EOC.										
			• Kiruna chooses error D1-cassette tape and sends it NASDA/EOC with regular shipment.										

## (4) POLDER

Training Items	Working Items	Response	Training
POLDER	Media Shipment	NASDA/EOC	<ul> <li>NASDA/EOC collects all D1-cassettte tapes from overseas stations and assumes that L0 edit is performed.</li> <li>NASDA/EOC sends D1-cassette tape, recorded POLDER L0 edited data, to CNES/POLDER by specified courier company on Wednesday.</li> <li>NASDA/EOC sends Level 0 data shipment report (SRZD) to POLDER.</li> </ul>
		POLDER	<ul> <li>POLDER receives edited L0 data recorded D1-cassette tape from NASDA/EOC.</li> <li>POLDER receives SRZD from NASDA/EOC.</li> <li>POLDER sends correct RDZD to NASDA/EOC, after receiving D1-cassette tapes.</li> </ul>
	Request for resending edited L0 data	POLDER	<ul> <li>POLDER generates RDRZ for error case and sends it NASDA/EOC.</li> <li>POLDER receives new D1-cassette tape with regular shipment.</li> <li>POLDER sends RDZD to NASDA/EOC.</li> </ul>
		NASDA/EOC	<ul> <li>NASDA/EOC receives RDRZ include error case from POLDER. Then assumes that copy new L0 edited data from master D1-cassette tape.</li> <li>NASDA/EOC sends new edited L0 data recorded D1-cassette tape with regular shipment.</li> <li>NASDA/EOC sends SRZD to POLDER.</li> </ul>

Table 9.2 Media Shipment Timeline

	Training Week														Week #76								Train			Training Week #5								Training Week #6								
			lonth																		Sep. 11 12 13 14 15 16 17								18 19 20 21 22 23 24								25 26 27 28 29 30					
	Day 4.4 Wed.														. 5	u. Fri	7 Sat	8 Sun	9 Mon	10 Tue	11 Wed.	12 Thu.	13 Fri	14 Sat	15 Sun	16 Mon	Tue	18 Wed	. 19 . Thu	. 20 Fri	21 Sat	1 St	2 23 n Mor	24 Tue	25 Wed.	26 Thu	27 Fri	28 Sat	Sun	30 Mon		
Event					NASDA	TACC		CNES/	NASA Kiru			Redu			T				i					ı					ī	1						1	1					
ASF Stations	RAW data D1-cassette	-	MMO -	DDS -	Od Dsk	- TACC	SN -	- POLDER	snd	snd	snd	-	Date Mon. Wed. Fri.		+	+													1	1	1	+	-		+-	t	<u> </u>	$\vdash$				
WFF Stations		-	rcv		fwd	-	-	-	-	-	-	-	Mon. Thu.		1	1													1	1	1					1						
Kiruna Stations	RAW data shipment report	SRRM	rcv	fwd	-	-	-	-	snd	snd	snd	-	Mon. Wed. Fri.																İ								İ					
	RAW data readability report	RDRM	snd	fwd	-	-	,	-	rcv	rcv	rcv	-	with in 10 days		1	error case						l		ŀ					i	l	i						i					
CNES/POLDER	Level 0 data D1-cassete	-	-	-	snd	-	,	-		-	-	-	Tue.																į	į						į	į					
		-	-	-	-	-	,	rcv	,	-	-	-	Fri.																													
	Level 0 data shipment report	SRZD	snd	fwd	-	-	•	rcv	-	-	-	-	Tue.			ļ													į	į						i						
	Level 0 data readability report	RDZD	rcv	fwd	-	-	-	snd	-	-	-	-	10 days after red	ceiving		l					ŧ		ror case						<u> </u>	į.						<u> </u>	<u> </u>					
NASDA/SN	Backup Operation Request	FAX or TEL		snd		-	rev	1	ı	1	-	-							-																							
	Backup Operation Request (Answer)	FAX or TEL		rcv		•	snd	•	1	•	-	•							_										i													
	D-1 management info.	RERA	rcv	fwd	-	•	snd	•	-	•	-	-								_									ļ	ļ.						!						
	RAW data D1-cassette	-	FEV	-	fwd	-	snd	1	1	-	-	_								_									-	1												

Duedate for MOIF I/F Duedate for RDRM I/F Shipping day for D1-casstte

### 10. Communication Training

#### 10.1. Objective

Communication training is the training to confirm the contact point, communication procedure and correct information in case of anomaly.

#### 10.2. Overview

Communication Training summarized in Table. 10.1.

Table. 10.1 Communication Training Items

Training name	Training Items	Training ID	Contents of Training			
Communication	Report	2311000	Data loss			
Training	-	2312000	NRT data abnormal case			
		2313000	Re-processing request			
		2314000	HK data request form POLDER			

#### 10.3. Training Plan

Data Loss Report (Sheet format is shown Appendix D)

When NASDA/EOC receiving and recording subsystem have some anomalous situation and have data loss, NASDA/EOC informs sensor providers and NRT data users concerned with data loss. Also Overseas stations have some anomalous situation and have data loss, Overseas stations inform NASDA/EOC concerned with data loss notification.

This training will be performed to just inform sensor provider and NRT data users to data loss report.

Delay of NRT data transmitting. (Sheet format is shown Appendix D)

When NASDA/EOC facility has some anomalous situation and can not delivery NRT data to the related agencies, NASDA/EOC will inform them by data delivery delay notification. Also Overseas stations have some anomalous situation and can not delivery NRT data to NASDA/EOC, Overseas stations inform NASDA/EOC by data delivery delay notification.

This training will be performed to just inform NRT data users to NRT data delivery delay notification.

Re-processing request (Sheet format is shown Appendix D)

When the sensor provider finds an error in the level 0 data or HK data delivered from EOC, the sensor provider will inform the error to EOC by using OCL.

This training will be performed to exchange information about re-processing request between NASDA/EOC and the sensor providers.

HK data request from POLDER (Sheet format is shown Appendix D)

CNES can request NASDA to process past HK TLM data when an anomalous situation of POLDER instrument itself or spacecraft is found in delivered data in nominal operation.

This training will be performed to exchange information about POLDER past HK data processing request between NASDA/EOC and CNES/POLDER.

### 10.4. Contents of Training

(1) Data Loss Report (Sheet format is shown Appendix D)

Training Items	Working Items	Response	Training
Report	Data loss at NASDA/EOC	NASDA/EOC	<ul> <li>The target pass for this training is RSP 8. This RSP start Sep.26 2:18:53(UT) in CoO.</li> <li>After complete processing this RSP in CoO, NASDA/EOC assume that this pass loss caused by anomaly.</li> <li>NASDA/EOC sends data loss report to related agencies by OCL.</li> </ul>
		Sensor provider & NRT data users	Sensor provider and NRT data users receive data loss report from NASDA/EOC_by OCL.
	Data loss at Overseas Stations	ASF	<ul> <li>The target pass for this training is RSP 52. This RSP start Sep.26 20:53:10(UT).in CoO.</li> <li>After complete processing this RSP in CoO, ASF assume that this pass loss caused by anomaly.</li> <li>ASF send data loss report to NASDA/EOC by OCL.</li> </ul>
		WFF	<ul> <li>The target pass for this training is RSP 40. This RSP start Sep.26 15:57:27(UT) in CoO.</li> <li>After complete processing this RSP in CoO. WFF assume that this pass loss caused by anomaly.</li> <li>WFF send data loss report to NASDA/EOC by OCL.</li> </ul>
		Kiruna	<ul> <li>The target pass for this training is RSP 32. This RSP start Sep.26 12:26:41(UT) in CoO.</li> <li>After complete processing this RSP in CoO, Kiruna assume that this pass loss caused by anomaly.</li> <li>Kiruna send data loss report to NASDA/EOC by OCL.</li> </ul>
		NASDA/EOC	<ul> <li>NASDA/EOC receives data loss report form ASF, WFF and Kiruna by OCL.</li> <li>NASDA/EOC sends data loss report to related agencies by OCL.</li> </ul>
		Sensor provider & NRT data users	Sensor provider and NRT data users receive data loss report from NASDA/EOC_by OCL.

### (2) Delay of NRT data transmitting (Sheet format is shown Appendix D)

Training Items	Working Items	Response	Training
Report	Delay of NRT data transmitting at NASDA/EOC	NASDA/EOC	<ul> <li>The target pass for this training is RSP 5. This RSP start Sep.25 1:14:06(UT) in CoO.</li> <li>After complete processing this RSP in CoO, NASDA/EOC assume that delivery of NRT data delay caused by anomaly.</li> </ul>
			• NASDA/EOC sends NRT data delivery delay notification to related agencies by OCL.
		Sensor provider & NRT data users	• Sensor provider and NRT data users receive NRT data delivery delay report from NASDA/EOC_by_OCL.
	Delay of NRT data transmitting at Overseas stations	ASF	<ul> <li>The target pass for this training is RSP 53. This RSP start Sep.25 21:18:11(UT).in CoO.</li> <li>After complete processing this RSP in CoO, ASF assume that delivery of NRT data delay caused by anomaly.</li> <li>ASF sends NRT data delivery delay notification to NASDA/EOC.</li> </ul>
		WFF	<ul> <li>The target pass for this training is RSP 41. This RSP start Sep.25 16:22:41(UT) in CoO.</li> <li>After complete processing this RSP in CoO, WFF assume that delivery of NRT data delay caused by anomaly.</li> <li>WFF sends NRT data delivery delay notification to NASDA/EOC by OCL.</li> </ul>
		Kiruna	<ul> <li>The target pass for this training is RSP 29. This RSP start Sep.25 11:11:47(UT) in CoO.</li> <li>After complete processing this RSP in CoO, Kiruna assume that delivery of NRT data delay caused by anomaly.</li> <li>Kiruna sends NRT data delivery delay notification to NASDA/EOC by OCL.</li> </ul>
		NASDA/EOC	<ul> <li>NASDA/EOC receives data loss report form ASF, WFF and Kiruna.</li> <li>NASDA/EOC sends data loss report to related agencies.</li> </ul>
		Sensor provider & NRT data users	Sensor provider and NRT data users receive data loss report from NASDA/EOC.

### (3) Re-Processing request (Sheet format is shown Appendix D)

Training Items	Working Items	Response	Training
Report	Re-processing request	SeaWinds	<ul> <li>SeaWinds select error L0 data which received during CoO. (Assume that one of the data received from EOC has error.)</li> <li>SeaWinds sends Level 0 Data Error report which specified in MOIS to NASDA/EOC by OCL. (Date of Data, Downlink Segment No., L0 signal file name are need.)</li> <li>SeaWinds receives answer of Level 0 Data Error report by OCL. (Contents of OCL is simulated.)</li> <li>SeaWinds sends Re-processing Level 0 data confirmation report to NASDA/EOC by OCL. (Contents of OCL is simulated.)</li> </ul>
		CNES/DCS	<ul> <li>CNES/DCS select error L0 data which received during CoO. (Assume that one of the data received from EOC has error.)</li> <li>CNES/DCS sends Level 0 Data Error report which specified in MOIS to NASDA/EOC by OCL. (Date of Data, Downlink Segment No., L0 signal file name are need.)</li> <li>CNES/DCS receives answer of Level 0 Data Error report by OCL. (Contents of OCL is simulated.)</li> <li>CNES/DCS sends Re-processing Level 0 data confirmation report to NASDA/EOC by OCL. (Contents of OCL is simulated.)</li> </ul>
		ILAS-II	<ul> <li>NIES select error L0 data which received during CoO. (Assume that one of the data received from EOC has error.)</li> <li>NIES sends Level 0 Data Error report which specified in MOIS to NASDA/EOC by OCL. (Date of Data, Downlink Segment No., L0 signal file name are need.)</li> <li>NIES receives answer of Level 0 Data Error report by OCL. (Contents of OCL is simulated.)</li> <li>NIES sends Re-processing Level 0 data confirmation report to NASDA/EOC by OCL. (Contents of OCL is simulated.)</li> </ul>

Training Items	Working Items	Response	Training
-	-	TEDA	• TEDA select error L0 data which received during CoO. (Assume that one of the data
			received from EOC has error.)
			• TEDA sends Level 0 Data Error report which specified in MOIS to NASDA/EOC by OCL.
			(Date of Data, Downlink Segment No., L0 signal file name are need.)
			• TEDA receives answer of Level 0 Data Error report by OCL. (Contents of OCL is
			<u>simulated.)</u>
			• TEDA sends Re-processing Level 0 data confirmation report to NASDA/EOC by OCL.
			(Contents of OCL is simulated.)
		NASDA/EOC	NASDA/EOC receives Level 0 Data Error report from sensor providers.
			NASDA/EOC sends answer of Level 0 Data Error report to sensor providers.
			NASDA/EOC receives Re-processing Level 0 data confirmation report from sensor
			providers.

### (4) HK data request from POLDER (Sheet format is shown Appendix D)

Training Items	Working Items	Response	Training			
Report	HK data request	CNES/POLD	• CNES/POLDER sends Past HK TLM Data Delivery Request which specified in MOIS t			
	from POLDER	ER	NASDA/EOC by OCL (Target Period is need.).			
			• CNES/POLDER sends HK TLM processing result report to NASDA/EOC by OCL.			
		NASDA/EOC	NASDA/EOC receives Past HK TLM Data Delivery Request from CNES/POLDER			
			• NASDA/EOC sends HK TLM data generating request to NASDA/TACC.			
			NASDA/EOC receives processing complete notification from NASDA/TACC.			
			• NASDA/EOC sends HK TLM processing result report to CNES/POLDER.			
		NASDA/TAC	• NASDA/TACC receives HK TLM generating request from NASDA/EOC.			
		C	• NASDA/TACC sends answer of HK TLM data generating request to NASDA/EOC.			
			NASDA/TACC sends processing complete notification to NASDA/EOC.			

### Table 10.2 Communication Training Timeline

			Training Mon														Week #	78				Cont	ember		k #80				
			Da														24				25	Sepi	ember		26			27	,—
																	Tuesda				dnesda				rsday			Frid	
Event	File Name	1	Tim		SDA			Sea	CNES/	CLS/	EA	NASDA	NASA	Kiruna	NOAA	0	6 ′	12	18 (	) 6	12	18	0	6	12	18	0	6	12 1
		EOC			AD2 P	TACC	EORC	Winds	POLDER	JAPAN	NIES	TEDA	NGN									<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u></u>
Data loss at EOC																						<u> </u>		<u> </u>		<u> </u>			
Data loss Report from EOC	OCL	snd	-	-	rcv	-	rcv	rcv	rcv	rcv	rcv	rcv	-	-	rcv									<u> </u>					
Data loss at Overseas Staion																						_		<u> </u>					
Data loss Report from ASF	OCL	rcv	-	-	-	-	-	-	-	-	-	-	snd	-	-									<u> </u>					
Data loss Report from WFF	OCL	rcv	-	-	-	-	-	-	-	-	-	•	snd	-	-														
Data loss Report from Kiruna	OCL	rcv	-	-	-	-	-	-	-	,	-		-	snd	-														
Data loss Report from EOC	OCL	snd	-	-	rcv	-	rcv	rcv	rcv	rcv	rcv	rcv	-	-	rcv														T
Delay of NRT data at EOC																													
NRT Anomaly Notification from EOC	OCL	snd	-	-	rcv	-	rcv	rcv	rcv	rcv	rcv	rcv	-	-	rcv					İ							l		
Delay of NRT data at Overseas stations																													
NRT Anomaly Notification from ASF		rcv	-	-	-	-	-	-	-	-	-	-	snd	-	-														
NRT Anomaly Notification from WFF	OCL	rcv	-	-	-	-	-	-	-	-	-	-	snd	-	-														
NRT Anomaly Notification from Kiruna	OCL	rcv	-	-	-	-	-	-	-	-	-	-	-	snd	-														
NRT Anomaly Notification from EOC	OCL	snd	-	-	rcv	-	rcv	rcv	rcv	rcv	rcv	rcv	-	-	rcv					i	Ť	İ						一	
	•															•					•	•				•			
Re-processing request																													
Level 0 Data Error Notification from SeaWinds	OCL	rcv	-	-	-	-	-	snd	-	-	-	-	-	-	-		İ	İ		ı	Ī			•					
Level 0 Data Error Notification from DCS	OCL	rcv	-	-	-	-	-	-	-	snd	-	-	-	-	-		İ	İ		ı	Ī			•					
Level 0 Data Error Notification from LIAS-II	OCL	rcv	-	-	-	-	-	-	-	-	snd	-	-	-	-					İ									
Level 0 Data Error Notification from TEDA	OCL	rcv	-	-	-	-	-	-	-	-	-	snd	-	-	-														
Comfirmation Report of the Re-processed Data	OCL	rcv	-	-	-	-	-	snd	snd	snd	snd	snd	-	-	-														
	•																												
HK data reqeust from POLDER																													$\Box$
Past HK Data Delivery Request	OCL or E-mail	rcv	-	-	-	-	-	-	snd	-	-	-	-	-	-			Ī			Ť	Ī	İ				İ		
Hk Data Processing Request	FAX	-	-	-	-	-	-	-	-	-	-	-	-	-	-			T			Ť								
POLDER HK TLM data (TBD)	R#POLDER	rcv	fwd	-	-	snd	-	-	-	-	-	-	-	-	-		İ			Ť	İ	İ		İ				寸	Ť
POLDER HK TLM data (TBD)	HKDTPOLDER	snd	fwd	-	-	-	-	-	rcv	-	-	-	-	-	-		i	Ť		i	Ť	İ					İ	寸	寸
Hk Data Processing Result	OCL	snd		-	_	-	-	-	-	-	-	-	-	-	-		<u> </u>	Ť		+	†	<u> </u>						$\neg$	

### Appendix A Acronyms and Abbreviations

ADEOS-II : Advanced Earth Observing Satellite-II

AGSID : ADEOS-II to Ground Stations Interface Document

AMSR : Advanced Microwave Scanning Radiometer
ASF : Alaska SAR Facility (University of Alaska)
CLS : Collect Localisation Satellites (CNES)
CNES : Centre National d'Etudes Spatiales

DCS : Data Collection System
DMS : Dynamics Monitoring System

DDS : Data Distribution Subsystem (NASDA/EOIS)

DRTS : Data Relay and Tracking Satellite EA : Environment Agency of Japan

EM : Engineering Model

EOC : Earth Observation Center (NASDA)

EOIS : Earth Observation Data and Information System (NASDA/EOC)

EORC : Earth Observation Research Center (NASDA)

EOS : Earth Observing System

**EOSDIS** : **EOS Data and Information System** 

GLI : Global Imager

ILAS-II : Improved Limb Atmospheric Spectrometer-II

<u>InetB</u>: <u>Internet Back Up</u>

JAFIC : Japan Fisheries Information Service Center

JMA : Japan Meteorological Agency

LLM : Low Light Mode

MDR : Mission Data Recorder

MMO : Mission operation Management Organization

MOIF : Mission Operation Information File

MRT : Mission Real Time
MST : Mission Simulation Test
MSTP : Mission Simulation Test Plan

MSTCP : Mission Simulation Test Control Plan

NASA : National Aeronautics and Space Administration NASDA : National Space Development Agency of Japan

NESDIS : National Environmental Satellite Data and Information Service

NICD : Network Communications Interface Control Document

NGN : NASA/NOAA Ground Network

NIES : National Institute for Environmental Studies NOAA : National Oceanic and Atmospheric Administration

NRPS : NASDA Recording and Processing System

NRT : Near Real Time

NTSK : NASDA Transportable Station-Kiruna

OBC : OnBoard Computer

OCL : Operations Coordination Letter

PFM : Proto-Flight Model

POLDER : Polarization and Directionality of the Earth's Reflectances

SeaPAC : SeaWinds Processing and Analysis Center (NASA)

SeaWinds : NASA-JPL Scatterometer On ADEOS-II

SN : Space Network (NASDA)
SSC : Sweden Space Corporation
SSCAS : SSC Antenna System

TACC : Tracking And Control Center (NASDA/TKSC)

TBD : To Be Determined

TEDA : Technical Data Acquisition Equipment

: Tsukuba Intersatellite Communication Station: Tsukuba Space Center (NASDA) TICS

TKSC

: Visual Monitoring System: Wallops Flight Facility VMS WFF

### Appendix B Routine Operation Training ID

**Table B-1 Routine Operation Training ID** 

Training Name	Training Items	Contents of Training	Training			
_		_	ID			
21000000	21100000	100000 Mode-1 Planning				
Mission Planning	Normal Planning	Mode-2 Planning	2112000			
Training	Operation	Re-submitting REQR	2113000			
		Re-submitting REQQ	2114000			
	21200000	Restarting OBC	2121000			
	Anomaly Planning	Rescheduling from Mode-1 to Mode-2	2122000			
	Operation	Internet-Back-up	2123000			
		ILAS-II Campaign	2124000			
		Mean Orbit Data Delivery	2125000			
22000000	22100000	22100000 Media Shipment				
Media Shipment Training	ASF Station	Request for re-sending RAW data	2212000			
	22200000					
	WFF Station	Request for re-sending RAW data	2222000			
	22300000	Media Shipment	2231000			
	Kiruna Station	Request for re-sending RAW data	2232000			
	22500000	Media Shipment	2251000			
	POLDER	Request for re-sending edited L0 data	2252000			
23000000	23100000	Data loss	2311000			
Communication Training	Report	Delay of NRT data transmission	2312000			
		Re-processing request	2313000			
		HK data request form POLER	2314000			

### **Appendix C** Routine Operation Training Report Format

T	710200	II Training Result Rep	1	
<u>ignature</u>		Organization		
raining Name		Training ID		
raining Date				
ontents of Training				
raining Result				
peration procedure				
nange proposal				

This page describes ADEOS-II Training Result Report.

#### a. Report Number AD2-OP#2-XXX-XXX

First XXX is agency code. Definition of organization code is shown table C-1

**Table C-1 organization code** 

Category	Agency	Agency code
Sensor Providers	<u>SeaPAC</u>	SPC
	<u>CNES/POLDER</u>	POL
	<u>CNES/DCS</u>	<u>DCS</u>
	<u>NIES</u>	<u>IL2</u>
	NASDA/SEMG	TED
Overseas Stations	<u>ASF</u>	<u>ASF</u>
	WFF/DSMC	WFF
	Kiruna/SSC	KRN
<b>Data utilization Organization</b>	<u>NOAA</u>	<u>NOA</u>

Second XXX is sequential number. It should be add by each agencies.

#### b. <u>Signature</u>

Operator who attend training is sign.

#### c. Organization

Write organization name.

### d. Training name and Training ID

Training name and Training ID for Result Report is shown in Table C-2.

Table C-2 Training name and Training ID for Training Result Report

<b>Training Name</b>	<b>Training ID</b>	<b>Contents of Training</b>	Note
Normal Planning	<u>21100000</u>	Mode-1 Planning, Mode-2	Report all together about Normal
<u>Operation</u>		Planning. Re-submitting	Planning Operation.
		REQR, Re-submitting REQQ	
<b>Anomaly Planning</b>	<u>2121000</u>	Restarting OBC.	<u>N/A</u>
<u>Operation</u>		Rescheduling from Mode-1 to	
		Mode-2.	
	<u>2124000</u>	ILAS-II Campaign	<u>N/A</u>
	<u>2125000</u>	Mean Orbit Data Delivery	<u>N/A</u>
Media Shipment	2210000	Media Shipment and Request	ASF station reports.
<b>Training</b>		for re-sending RAW data	_
	<u>22200000</u>	Media Shipment and Request	WFF Station reports
		for re-sending RAW data	
	<u>22300000</u>	Media Shipment and Request	Kiruna Station reports.
		for re-sending RAW data	
	<u>22500000</u>	Media Shipment and Request	CNES/POLDER repots.
		for re-sending edited L0 data	
Communication	23100000	Data loss, Delay of NRT data	All agencies report related training
<u>Training</u>		transmission, Re-processing	<u>items.</u>
		request and HK data request form	
		POLER	

Note: InetB is not include this result report.

#### e. Training Date

Fill the training date. If training is performed several days, put training periods.

#### f. Contents of Training

Fill the Contents of Training shown in Table C-2.

### g. Training Result

Fill the result of each training. If training is performed without trouble, write contents of training and O.K. If something trouble in training and its trouble is related to other organization, report issue and resolution.

### h. Operation procedure change proposal

If some inconvenience operation procedure has occurred between NASDA/EOC and related agencies, trainee propose improvement of operation procedure.

AD2-OP#2-EOC-001

### ADEOS-II Training Result Report (Sample)

<u>Signature</u>	那須田 太郎	<u>Organization</u>	NASDA/EOC
Training Name	Normal Planning Operation	Training ID	<u>21100000</u>
Training Date	Aug. 28,2002 - Sep. 27, 2002		

Contents of Training

Mode-1 Planning,

Mode-2 Planning,

Re-submitting REQR,

Re-submitting REQQ

-			_		1.4
Tra	ını	nr	ıΚ	291	ılt.
114		110	, ,,	$\cdot$	416

Mode-1 Planning was performed without trouble. Procedure is confirmed by operator.

Mode-2 Planning was performed without trouble. Procedure is confirmed by operator.

Re-submitting REQR had some anomaly on system and delay of submitting REQR. (Refer to problem report No.XXX).

Re-submitting REQQ. XXX (some agencies) delayed for sending re-submitting REQQ.

Operation	<u>procedure</u>
change prop	neal

If some inconvenience operation procedure has occurred between NASDA/EOC and related agencies, trainee propose improvement of operation procedure.

### **Appendix D Sheet Format**

- (1) OCL format for SeaWinds
- (2) OCL format for ASF
- (3) OCL format for WFF
- (4) OCL format for NOAA
- (5) Data error notification for SeaWinds
- (6) OCL format for POLDER
- (7) Past HK Data Delivery Request
- (8) OCL format for DCS
- (9) Level 0 data Error Notification for DCS
- (10) OCL format for SSC
- (11) OCL format for ILAS-II
- (12) Level 0 data Error Notification for ILAS-II
- (13) Frequency of Orbit delivery change request for ILAS-II
- (14) OCL format for TEDA
- (15) Level 0 data Error Notification for TEDA
- (16) Data Loss and Level 0 data Delivery Delay Notification from NASDA/EOC
- (17) Data Loss and Level 0 data Delivery Delay Notification from Overseas Station
- (18) ADEOS-II Anomaly Notification FAX

## ☐ URGENT ☐ NORMAL

<u>ADEOS-II/SeaWinds</u> Operations Coordination Letter					
	Total Pages (incl. this form)				
то:	Fax No. : Phone No. :				
CC:	Fax No. : Phone No. :				
FROM:	Fax No. : Phone No. :				
ADEOS-II/SeaWinds OCL No.	Date: / /				
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Command Operation Change Request (Updated REQQ) OPLN/SHAQ File Delivery Delay Notification of Orbit Data Delivery Frequency Change  SUBJECT: REQUESTED RESPONSE DATE: / MESSAGE	□ Data Acquisition Loss Report □ Data Error Report □ Level 0 Data □ HK TLM Data □ Other Data ( ) □ MOIF Error Report □ Q &A □ Others ( )				
APPROVED BY: CHECKED BY	PREPARED BY:				
OCL RE	CEPTION				
ATTENTION: FAX No.:  THIS OCL WAS RECEIVED ON / / TRANSMISSION OF THIS OCL WAS IMCOMPLETED, PLEASE SEND AGAIN MESSAGES:					
SIGNATURE:					

(2) OCL for ASF

SIGNATURE:

	IORMAL				
<u>ADEOS-II/ASF</u> Operations Coordination Letter					
			Total Pages (incl. this form)		
то:	Ph	x No. one No. x No.	:		
CC: FROM:	Fa	one No. x No. one No.	:		
ADEOS-II/ASF OCL No.		te: /	1		
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Commalies Operation Change Request (Updated REQQ) OPLN/SHAQ File Delivery Delivery Delivery Change  SUBJECT: REQUESTED RESPONSE DELIVERY DELIVERY CHANGE	elay     very	Data Acqu Data Erro Level ( Other MOIF Erro Q &A Others (_	Data HK TLM Data Data ( ) or Report )		
APPROVED BY:	CHECKED BY:		PREPARED BY:		
	OCL RECE	PTION			
ATTENTION: FAX No.:  THIS OCL WAS RECEIVED OF THIS OF	ON / /		ASE SEND AGAIN		

(3) OCL for WFF

☐ URGENT ☐ NORMAL					
<u>ADEOS-II/WFF</u> Operations Coordination Letter					
	Total Pages (incl. this form)				
то:	Fax No. : Phone No. :				
CC:	Fax No. : Phone No. :				
CC:	Fax No. : Phone No. :				
FROM:	Fax No. : Phone No. :				
ADEOS-II/WFF OCL No.	Date: / /				
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Command Operation Change Request (Updated REQQ) OPLN/SHAQ File Delivery Delay Notification of Orbit Data Delivery Frequency Change  SUBJECT: REQUESTED RESPONSE DATE: / MESSAGE	Data Acquisition Loss Report  Data Error Report  Level 0 Data HK TLM Data  Other Data ( )  MOIF Error Report  Q &A  Others ( )				
APPROVED BY: CHECKED BY:	PREPARED BY:				
	CEPTION				
ATTENTION: FAX No.:  THIS OCL WAS RECEIVED ON / / TRANSMISSION OF THIS OCL WAS IMCORMESSAGES:					
SIGNATURE:					

(4) OCL for NOAA

□ URGENT □ NORMA	<u>L</u>					
<u>ADEOS-II/NOAA</u> Operations Coordination Letter						
	Total Pages (incl. this form)					
то:	Fax No. : Phone No. :					
CC:	Fax No. : Phone No. :					
FROM:	Fax No. : Phone No. :					
ADEOS-II/NOAA OCL No. OT2-2	Date: Sep. / /2002					
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Command Operation Change Request (Updated REQQ) OPLN/SHAQ File Delivery Delay Notification of Orbit Data Delivery Frequency Change  SUBJECT: REQUESTED RESPONSE DATE: / MESSAGE  APPROVED BY: CHECKED B	Data Acquisition Loss Report Data Error Report Level 0 Data HK TLM Data Other Data ( ) MOIF Error Report Q &A Others ( )					
APPROVED BY: CHECKED B	T: PREPARED BY:					
OCL R	OCL RECEPTION					
ATTENTION: FAX No.:  THIS OCL WAS RECEIVED ON / TRANSMISSION OF THIS OCL WAS IMCOMESSAGES:	/					
SIGNATURE:						

Data Error Notification for  ☐? SeaWinds Level 0 / ☐? HK Source Packet				
Error Notification	(SeaPAC → NASDA/EOC & NOAA)			
Target Data	Date of Data YYYYMMDD  Downlink Segment No. DSSEAddddsss-zz  Level 0 Signal SEA_MDR_XXX_L0_SIG_  ETABLE STATE OF THE STATE			
Error	File Name YYYYMMDD_pnnn  □ Number of packets in signal file does not correspond to the status reporfile.  □ Continuity of sequence counter in signal file does not correspond to the status report file.  □ Other ( )			
Note				
Response to the	Error Notification (NASDA/EOC → SeaPAC & NOAA)			
Deliver Date of the Re-processed Data	1 YYYYMMIDI)			
Note				
Confirmation Re	eport of the Re-Processed Data (SeaPAC → NASDA/EOC & NOAA)			
Confirmation Result	<ul> <li>□ Error was solved</li> <li>□ Same error was found.</li> <li>□ The quality of re-processed data became worse than the original one.</li> <li>□ Others ( )</li> </ul>			
Note				

### ☐ URGENT ☐ NORMAL

ADEOS-II/POLDER Operations Coordination Letter					
	Total Pages (incl. this form)				
TO:	Fax No. : Phone No. :				
CC:	Fax No. : Phone No. :				
FROM:	Fax No. : Phone No. :				
ADEOS-II/POLDER OCL No.	Date: / /				
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Command Operation Change Request (Updated REQQ) OPL1 File Delivery Delay Past HK TLM Data Delivery Request Notification of Orbit Data Delivery Frequency Change  SUBJECT: REQUESTED RESPONSE DATE: / MESSAGE	□ Data Acquisition Loss Report □ Data Error Report □ Level 0 Data □ HK TLM Data □ Other Data ( ) □ MOIF Error Report □ Q &A □ Others ()				
APPROVED BY: CHECKED BY	PREPARED BY:				
OCL RE	CEPTION				
ATTENTION: FAX No.:					
☐ THIS OCL WAS RECEIVED ON /	1				
☐ TRANSMISSION OF THIS OCL WAS IMCOMPLETED, PLEASE SEND AGAIN MESSAGES:					
SIGNATURE:					

	Past HK Data Delivery Request						
Request (CNES -	→ NASDA/E	EOC)	Date	YYYYMMDD			
Target Deried	From	YYYYMMDD	YYYYMMDD				
Target Period	То	YYYYMMDD					
Reason							
Processing Result (NASDA/EOC → CNES)		Date	YYYYMMDD				
	☐ HK TLM data processing was completed successfully for requested target period.						
	☐ HK TLM data processing was failed for requested target period.						
Processing Result	☐ HK TLM data processing was partially failed for requested target period.						
	<pre>&lt;&lt; Period of successfully processed HK TLM data &gt;&gt;    From : YYYYMMDD    To : YYYYMMDD</pre>						
Note	(ex.: Reaso	on for failure of processing, et	tc.)				

### **ADEOS-II Operation Training No.2**

The contents of this OCL is simulated for training

## ☐ URGENT ☐ NORMAL

<u>ADEOS-II/DCS</u> Operations Coordination Letter					
		<u>1</u>	otal Pages (incl. this form)		
то:		Fax No. : Phone No. :			
CC:		Fax No. : Phone No. :			
FROM:		Fax No. : Phone No. :			
ADEOS-II/DCS OCL No.		Date: /	I		
PURPOSE OF THIS FAX  Notification of Anomalies Request of Real Time Command OPLN File Delivery Delay Notification of Orbit Data Delivery Frequency Change Data Acquisition Loss Report  SUBJECT: REQUESTED RESPONSE DATE: /		Data Error Report Level 0 Data HK TLM Data Other Data ( ) MOIF Error Report Q &A Others ()			
APPROVED BY:	CHECKED BY:		PREPARED BY:		
ATTENTION:	OCL RE	CEPTION			
FAX No.:					
☐ THIS OCL WAS RECEIVED		MDIETED DIEAS	SE SEND AGAIN		
TRANSMISSION OF THIS OCL WAS IMCOMPLETED, PLEASE SEND AGAIN  MESSAGES:					
SIGNATURE:					

## **ADEOS-II Operation Training No.2**

## The contents of this OCL is simulated for training

Level 0 Data Error Notification				
Error Notificati	ion (CNES/CLS $\rightarrow$ NASD.	A/EOC)		
Level 0 data	Data Date Downlink Segment No. Level 0 Signal File Name	YYYYMMDD DDCSddddsss-zz DCS_MDR_XXX_L0_SIG_YYYYMMDD_pnnn		
Error	Number of CCSDS sou with the corresponding	arce packet in the level 0 signal file is not consisted status report file nunter in the level 0 signal file is not consisted with		
Note				
Response to ti	he Error Notification (NAS	SA/EOC → CNES/CLS)		
Level 0	Accept Rejec	t : Reason		
Re-processing		ne level 0 data is regional data her (		
Delivery Date (Plan)	YYYYMMDD			
Note				
Confirmation F	Report of the Re-processe	ed Data (CNES/CLS → NASDA/EOC)		
Attention	NASDA/EOC Mr.			
Result	Error is corrected Same error is found as t More worse condition t Others (	he original level 0 data han the original level 0 data )		
Note				

П	UR	GEN	IT	N	OR	M	ΑL	
_	$\mathbf{v}$				$\smile$		/ \ L	

С	Opera	S-II/SSC ations tion Lett	er	
			<u>Total</u>	Pages (incl. this form)
TO:		Fax No. Phone No.	:	
TO:  CC:  FROM:  ADEOS-II/SeaWinds OCL No.  PURPOSE OF THIS FAX  Notification of Anomalies  OPLN/SHAQ File Delivery Delay Notification of Orbit Data Delivery Frequency Change  SUBJECT: REQUESTED RESPONSE DATE: MESSAGE  APPROVED BY:  CHECKED		Fax No. Phone No.	:	
		Fax No. Phone No.	:	
ADEOS-II/SeaWinds OCL N	lo.	Date: /	1	
Notification of Anomalies OPLN/SHAQ File Delivery Deliver	very	☐ MOIF Erro	or Repor	
APPROVED BY:	CHECKED BY:		PREF	PARED BY:
FAX No.:  ☐ THIS OCL WAS RECEIVED OF TRANSMISSION OF THIS OF	ON / /		\ \SE SEN	ND AGAIN
SIGNATURE:				

## ADEOS-II Operation Training No.2 本OCLの内容は訓練の為模擬しております。

### □ 緊急 □ 通常

			_	
(	-		e <b>r</b>	
			otal Page	es (incl. this form)
TO:				
CC:		Fax No. : Phone No. :		
FROM:	Fax No. : Phone No. :   Fax No. : Phone No. :   Fax No. : Phone No. :   Fax No. : Phone No. :   Fax No. : Phone No. :   Phon			
ADEOS-II/ILAS-II OCL No.		Date: / /		
□ 不具合通知 □ リアルタイムコマンド要求 □ 運用変更要求(再REQQ) □ OPLNファイル提供遅延通約 □ 軌道データ提供頻度変更要変 □ 軌道データ提供頻度変更通対 件名: 回答希望年月日: 連絡事項:	<b></b>	□ データ不具 □ レベル □ その他 □ MOIFエラ・ □ 質問 / 回答	!合報告 0データ □ ( -報告	l HK TLM データ ) )
承認:	確認:		作成:	
OCL <b>受確認領通知</b> 宛先:		(	Fax No. :	)
□ 本OCLの受領年月日:	/	□ 本OCLの送信	が不完全なた	-め、再送を要求
連絡事項: 署名: OCL <b>回答</b> 宛先:		<i>(</i> Fa	ıx No. :	
回答希望年月日:		(		)
連絡事項:				
承認:	確認:		作成:	

## ADEOS-II Operation Training No.2 本OCLの内容は訓練の為模擬しております。

	レベル0データエラー通知	
宛 先	宇宙開発事業団 地球観測センター	
対象データ	データ日付 年 月 日	
	ず ウンリンクセク・メント番号 DIL2ddddsss-zz	
	レベル0シグナルファイル名 IL2_MDR_XXX_L0_SIG_YYYYMMDD_pnr	nn
エラー内容	ステータスファイル内のパケット数情報とシグナルファイル内	<u></u>
	パケット数が一致しない。	
	ステータスレポート内のシーケンスカウンタ連続性情報と、シ	ノグ
	ナルファイル内のシーケンスカウンタ連続性が一致しない。	
	その他 (	)
備 考	†	
_		
	ンベルOエラー通知 回答(再処理レベルOデータ伝送通知)	
宛   先	国立環境研究所 地球環境研究センター	
再処理レベル0	年 月 日	
提供予定日		
/+ <u>+</u>		
備考		
	再処理レベル0データ内容確認通知	
宛   先	宇宙開発事業団 地球観測センター	
再処理データ	エラーが解消した。	
確認結果	同様のエラーが発生した。	
	より品質が劣化した。	
	その他 (	)
備考		

## ADEOS-II Operation Training No.2 本OCLの内容は訓練の為模擬しております。

軌道データ提供頻度変更要求通知 / 回答													
変更要求通知 (NIE	S NASDA)		要求日	/	/								
亦再無状期間	変更開始 (月水金 毎日)	/ /	(月曜のみ	<b>,</b> )									
変更要求期間	変更終了 (毎日 月水金)	/ /	(月曜のみ	<b>,</b> )									
変更理由													
変更要求回答 (NA	SDA NIES)		回答日	/	/								
回答	受領	棄却											
連絡事項	(要求棄却の理由等	<b>(</b>											

## ADEOS-II Operation Training No.2 本OCLの内容は訓練の為模擬しております

### □ 緊急 □ 通常

O	<u>EOS-II/TEDA</u> perations lination Letter
000.4	<u>Total Pages (incl. this form)</u>
то:	Fax No. : Phone No. :
cc:	Fax No. : Phone No. :
FROM:	Fax No.: Phone No. :
ADEOS-II/TEDA OCL No.	Date: / /
本OCLの目的	□ データ受信ロス報告 □ データ不具合報告 □ レベル0データ □ HK TLM データ □ MOIFエラー報告 □ 質問 / 回答 □ その他 ( )
承認: 確認:	作成:
OCL <b>受確認領通知</b> 宛先:	( Fax No. : )
□ 本OCLの受領年月日: / /	□ 本OCLの送信が不完全なため、再送を要求
連絡事項:	

# ADEOS-II Operation Training No.2 本OCLの内容は訓練の為模擬しております

	レベル0データエラー通知
宛  先	宇宙開発事業団 地球観測センター
対象データ	データ日付 年 月 日 ダウンリンクセグメント番号 DTEDddddsss-zz レベル0シグナルファイル名 TED_MDR_XXX_L0_SIG_YYYYMMDD_pnnn
エラー内容	ステータスファイル内のパケット数情報とシグナルファイル内のパケット数が一致しない。 ステータスレポート内のシーケンスカウンタ連続性情報と、シグナルファイル内のシーケンスカウンタ連続性が一致しない。 その他(
備考	
L	ベル0エラー通知 回答(再処理レベル0データ伝送通知)
宛 先	宇宙開発事業団 筑波宇宙センター 電子・情報系技術研究部 宇宙環境計測グループ
再処理レベル0 提供予定日	年 月 日
備考	
	再処理レベル0データ内容確認通知
宛 先	宇宙開発事業団 地球観測センター
再処理データ 確 認 結 果	エラーが解消した。 同様のエラーが発生した。 より品質が劣化した。 その他 ( )
備考	

Sample of Data loss and Level O data Delivery Delay Notification	EARTH OBSERVATION CENTER  1401, NUMANOUE, OHASHI, HATOYAMA-MACHI, HIKI-GUN, SATTAMA 350-0393, JAPAN FAXNo.: +81-492-98-1001
To: NOAA SeaPAC NIES CNES CLS(Japan) SEES TKSC EORC	
From : ADEOS- Recording subsystem Operator (RESTEC/EO (TEL:+81-49-298-1263/FAX:+81-49-298-1398/e-mail:ju Date : / / - : (UT)	
Subject : Raw data Acquisition Loss Notification Level O data Delivery Delay Notifica	
[Raw data Acquisition Loss Notification] <target data=""> Acquisition date: / / RSP Path No.:  Down link segments No.:  Raw data deficit type: All data Some data  <reason> Receiving subsystem problem Recording subsystem problem Satellite anomaly( ADEOS- DRTS) Weather( Head Others())</reason></target>	oblem
[Level O data Delivery Delay Notification] <target data=""> Acquisition date: / / RSP Path No.: Sensor name: GLI-1Km GLI-250m AMSR SeaWinds</target>	ILAS- POLDER TEDA DCS
[Note]	

ADEOS-II Operation Training No.2 The contents of this r	eport is simulated for training
Sample of Data loss and Level O data Delivery Delay Notification	FARTH OBSERVATION CENTER  1401,NUMANOUE,OHASHI,HATOYAMA-MACHI, HIIKI-GUN,SAITAMA 3500393,JAPAN FAX No.:+81-492-98-1001
To: NASDA/EOC (ADEOS- Recording subsystem Operator (RESTEC/EC	OC) )
From: ASF WFF Kiruna	
Date : <u>/ / - : (</u> UT)	
Subject : Raw data Acquisition Loss Notification Level O data Delivery Delay Notificat	
[Raw data Acquisition Loss Notification] <target data=""> Acquisition date: / / RSP Path No.:  Downlink segments No.:</target>	Station :
Raw data deficit type: All data Some data <reason> Receiving subsystem problem Recording subsystem problem Satellite anomaly( ADEOS- DRTS) Weather( Heav Others()</reason>	
[Level O data Delivery Delay Notification] <target data=""> Acquisition date: / RSP Path No.: Sensor name: GLI-1Km GLI-250m AMSR SeaWinds</target>	ILAS- POLDER TEDA DCS
[Note]	

### **ADEOS-II Operation Training No.2**

The contents of this FAX is simulated for training

# ADEOS II Anomaly Notification FAX

Anomaly Type:	DRTS	ADEOS II	Other
Anomaly Occurred:			(mm/dd/yy hh:mm) UTC
New Operations to Begin: _			(mm/dd/yy hh:mm) UTC
New REQR will be Sent: _			(mm/dd/yy hh:mm) UTC
Comments:			
Point of Contact for Questio	ns:		(Name)
			(Telephone)
			(FAX)
			(Email)

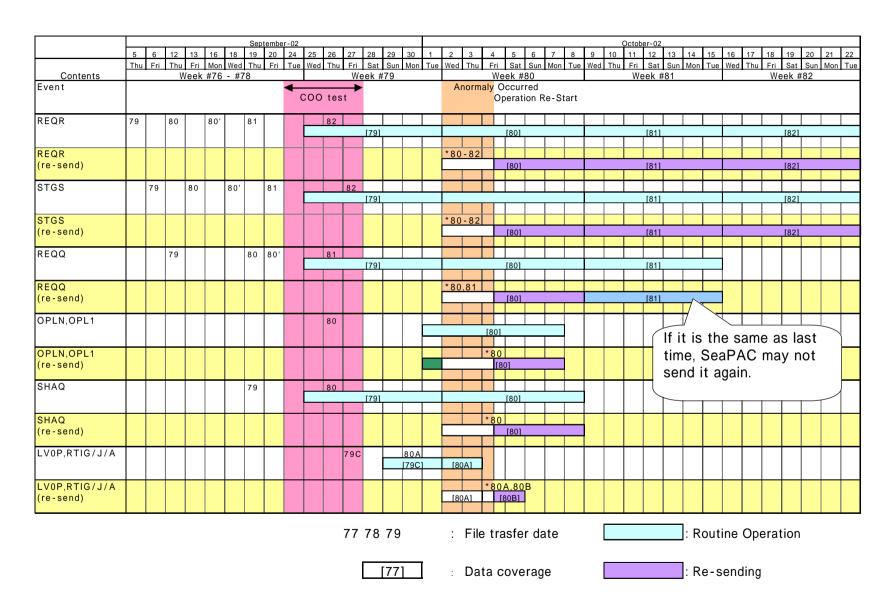
Please transmit form to FAX Number Email Address

DSMC/White Sands: +1-505-527-7233 wsnso@mail.wsc.nasa.gov

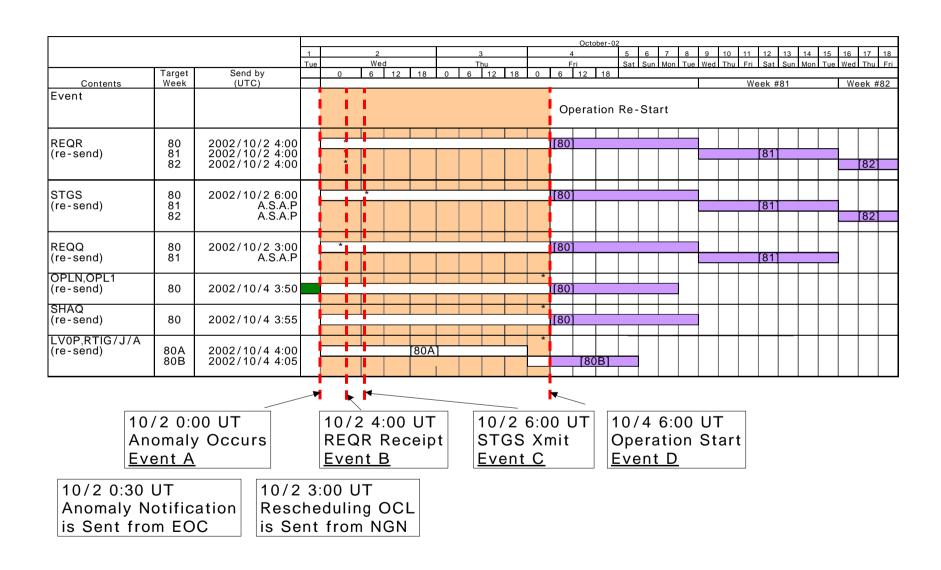
 $ASF: \qquad +1\text{-}907\text{-}474\text{-}5195 \qquad ops@asf.alaska.edu$ 

WFF +1-757-824-2403 david.hess@csoconline.com

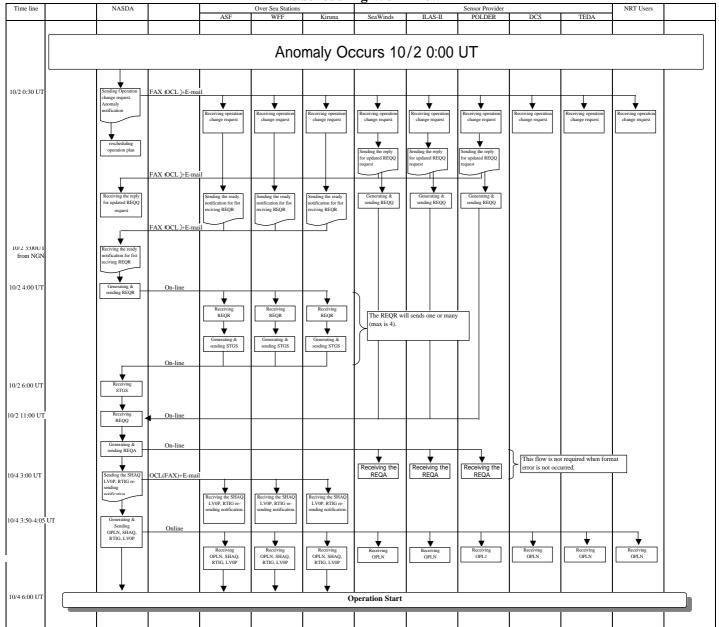
### Detail schedule of Restarting OBC



## Detail schedule of Restarting OBC



**Re-scheduling Work Flow** 



### ADEOS-II Operation Training No.2 Routine Operation Training Schedule

	Training Name	August 2002 September 2002  21													October 2002																																
	-	21	22	23	24	25	26 2	7 2	8 29	30	31	1	2	3	4	5	6	7 8	9	) 10	0 11	12	13	14	15	16 1	7 1	8 19	20	21	22	23	24	25	26 2	7 28	29	30	1	2	3 4	5	6	7	8	9	10 11
		Wed	Thu	Fri	Sat	Sun M	lon T	ue W	ed Th	u Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri S	at Su	n Mo	on Tu	ie We	d Thu	ı Fri	Sat \$	Sun M	∕lon Ti	ue W	ed Th	u Fri	Sat	Sun	Mon	Tue \	Wed 1	Γhu F	ri Sat	Sun	Mon	Tue V	Ved	Thu Fi	i Sat	Sun	Mon	Tue	Wed	Thu Fr
Operation	Fraining No.2 Routine Operation Training						i	i	T.	i				i		ı				i	i							i	i				i		i				į								
2000000 F	Routine Operation Training PART2		1																																												
2100000	Mission Planning Training		i i	Π			ı						Ī	į		ı				i	ı		i i			T.		i	i			ı	ı		ı				i	Ī	T.					i	
2110000	Normal Planning Operation			П										ı	i	ı							i i									ı								T						i	
2120000	Mode-1 Planning						T								Ī					ī	1	1	1 1		T			ī	1		1									T	T	1		$\neg$		i	
2130000	Mode-2 Planning		1				ı		- 1	1			l	l				ı		ı	i i	1	1 1	ŀ	ı			ı	l		1			1	ı				i	Ī	ŀ					ŀ	
2140000	Re-submitting REQR													į								1																		-							
2150000	Re-submitting REQQ														ı																																
2120000	Anomaly Planning Operation																							ŀ	i																						
2121000	Restarting OBC			П																		1																		T							
2122000	Reschedule from Mode-1 to Mode-2		1																			1	1 1											- 1					i	ı	- 1					i	
2123000	Internet Back-up (this training is per	fom	ed ir	n No	vem	ber)	i		- [	i			i	- [						i	i	i	1 1					i	i					i	i				i	- [	i					i	
2124000	ILAS-II Campaign		i				i	l	ī	i			i	i						i	i	i	1 1					i	i					ī	i				i		i					i	
2200000	Media Shipment Training		į	li	į		ı	ı		Ì		į	į			i		i	Ì	ı	i		i i	i	i	i	i	ı	i			i	i		ı	i			į	Ī	i	İ	i i				
2210000	ASF Station		ļ										İ					į					ļ ļ	į	į	į								ı		į					į						
2211000	Media shipment																																														
2212000	Request for re-sending RAW data		ļ										l																																		
2220000	WFF Station		į.										į										i	į																						i	
2221000	Media shipment		į				į	į	į				1	į		į		i		į	į		1 1	į	į			į	į					i i	į				į		į				į		
2222000	Request for re-sending RAW data		<u> </u>	Ш																		1																									
2230000	Kiruna Station		<u> </u>	<u> </u>											į			<u>i</u>					l i	<u>į</u>	<u>į</u>					<u> </u>						1						<u> </u>				i	
2231000	Media shipment		<u> </u>		i_		i_	i					į		i	i				i	<u>i</u>	1	ii	i_	i_			i	<u> </u>						i_											į	
2232000	Request for re-sending RAW data		<u>i                                      </u>				<u>į</u>			<u> </u>			į	i				<u> </u>		<u>i</u>	į.		<u>i</u> i				i	<u>i</u>	į.										į								<u> </u>
<del>2240000</del>	TKSC station		<u> </u>															İ					1 1	<u>į</u>	İ	1			<u> </u>							1					1	<u> </u>				İ	
2241000	Back up operation		<u> </u>	Ш											į																															į	
2242000	Media shipment		<u> </u>											į	į						į.																			i_						į	
2250000	POLDER		į.																																												
2251000	Media shipment		<u> </u>	Ш											į							1																									
2252000	Request for re-sending edited L0 date	ta	<u>i                                      </u>				i_	i_								i		1		i		1		<u>i</u>	<u>i</u>			i							i_												
2300000	Communication Training											i	į	į	į								i i																								
2310000	Report between operators		<u> </u>							<u> </u>				į								<u>i</u>	1 1						<u> </u>												- !				i		
2311000	Data Loss Report		<u> </u>	Ш					i	1			į		į	i						<u> </u>	Ш	į	į				1_					i_					į		į					į	
2312000	Delay of NRT data transmitting		<u> </u>	ш					į.						į	i				<u> </u>	<u> </u>	1	Ш					<u> </u>	<u> </u>																	į	
2313000	Re-Processing request		<u> </u>				į		į	İ			į		İ			ı		į	į							į	İ				į	<u>į</u>					į		į			į	<u>i</u>	İ	<u>i</u> _
2314000	HK data request from POLDER						1	Ī		Ī			Ī																											Ī							